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MODERN DIAGNOSIS AND TREATMENT OF SUPERFICIAL BLADDER TUMORS

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Almost two thirds of all newly discovered bladder tumors are in stage T_{is}, T_a or T_1. They are known es "superficial bladder tumors" (SBT) and are considered to be completely curable nowadays (1,3).

Early diagnosis is based on the screening methods - computerized urine cytology and suprapubic ultrasound. Cystoscopy, however, combined with multiple cold-cup biopsies, still remains the main diagnostic method. TU ultrasound gives the most precise information about tumor stage and is superior to CT scan (5). The latter is usually applied in cases of invasive (T_3-T_4) bladder cancer. The remaining X-ray studies give very little information. Magnetic resonance imaging is a sensible, but still very expensive method. The data from cytoflowmetry; cytogenetic analysis; the detection of the superficial tumor markers; other serum and urine markers, etc., give important prognostic information. Patient's immune status (immunodiagnosis resp.) also gains an increasing significance (3).

Modern therapy is usually combined. Transurethral operative methods (TuTUR and laser photocoagulation) are the most important of all (6). Photodynamic laser therapy is very perspective in this aspect. Open surgical methods are applied more rarely nowadays. Radiotherapy and systemic chemotherapy are rarely used, too, because of their numerous side effects and tumor's resistance (1). Local chemotherapeutics and immunomodulators, however, used as an adjuvant therapy after TuTUR, seem to be very popular (1,3).

Since 1985 till 1991 545 patients with bladder cancer have been treated in the Clinic of Urology, Varna. They present 56,4% of all urooncological diseases - i.e. bladder cancer takes the leading place among all urological neoplasms. 318 (58,4%) of all bladder tumors have been superficial. The diagnostic-curative algorithm, accepted in the Clinic, comprises the following methods and agents:

After detailed anamnesis and physical examination, either an echography, or a cystoscopy is done at first. The latter method may follow X-ray or ultrasound, but is always obligatory and is usually combined by cold-cup biopsy. Chromocystoscopy with methylene blue may help the detection of Ca_{is} and endophytic tumors. Cytology has a comparatively low sensitivity and is used rarely, mainly in the

follow-up period. Tumor stage may be accurately determined by IVP, cystoscopy and TU ultrasound. CT scan is useful when an involvement of the bladder wall is suspected. The results of these studies build our therapeutic strategy. TuTUR (under TU ultrasound control) is the method of choice in cases of SBT. The trocar suprapubic tumor resection enlarges the limits of this method. Recently we apply adjuvant laseer photocoagulation of the resection site. This method is used separately, as well. Open surgery is applied rarely, only in special cases.

In order to define the adequate metaphylaxis, all prognostic data are carefully analysed.In this aspect the detection of the superficial ABO(H) blood group antigens is very helpful (4).

Postoperatively, local chemotherapy by thio-TEPA, Mitomycin C and Farmorubicin is done. Local immunotherapy by BCG (Calgevax) is used since 1987 (1,2). In single cases we've also applied nonspecific immunotherapy by Levamisol, as well as local (intratumoral) immunotherapy by Interferon.

A total of 128 of our patients had 5-years follow-up. The general 5-years survival among them was 64,3%, while among the patients with SBT it reached 91%. These data are close to those, cited in the literature - 76 and 88%, respectively (1). More important are 2 other parameters, however: the recurrence rate (RR) and the percentage of tumor progression (TP). We came to the conclusion that they both depend on a lot of factors of prognostic value. These factors may be combined by a multifactorial analysis which is superior to the standard statistical methods. The routine use of such an analysis and of a computer, that leads the whole dispensary control and metaphylaxis, are directly forthcoming.

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